

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-28 are pending. No claims are amended, cancelled, or added.

The outstanding Official Action rejected Claim 1 under 35 U.S.C. § 112, first paragraph; rejected Claims 1-3, 5, and 6 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,983,073 to Ditzik in view of U.S. Patent No. 6,141,533 to Wilson et al. (hereinafter “Wilson”); rejected Claims 6-9, 11-15, 17-21, and 23-28 under 35 U.S.C. § 102(b) as unpatentable over Ditzik; and rejected Claims 4, 10, 16, and 22 under 35 U.S.C. § 103(a) as unpatentable over Ditzik and Wilson, and further in view of U.S. Patent No. 6,748,212 to Schmutz et al. (hereinafter “Schmutz”).

Applicants respectfully traverse the rejection of Claim 1 under 35 U.S.C. § 112, first paragraph for the following reasons.

Applicants submit that the specification discloses at least on page 5, lines 16-20; page 23, lines 29-32; page 24, lines 24-30; and Figure 4 “a user node” as claimed in Claim 1 providing and receiving services like a server. Accordingly, Applicants request that the rejection of Claim 1 under 35 U.S.C. § 112, first paragraph be withdrawn.

Applicants respectfully traverse the rejections of the claims under 35 U.S.C. § 103(a) over Ditzik and Wilson for the following reasons.

Claim 1 is directed to a communication system. The communication system includes, *inter alia*, a user node able to act as a server. The communication system further includes a relay node that is constantly connected to a corresponding node and is able to act as a proxy of the user node to request to communicate with the corresponding node, where the relay node and the user node act as one virtual node with respect to the corresponding node. The relay node includes, *inter alia*, a first signal receiving unit that receives data from the

corresponding node and a first data processing unit that supplies the data to a program executed by a processor in the relay node according to a communications session identifier number included in the data.

By way of summary, a relay node, which is constantly connected with a corresponding node, is provided to act as a proxy for a user node. The relay node is able to replace the user node to communicate with the corresponding node. Furthermore, middle-ware provided on the relay node and the user node allows these two nodes to act as a virtual node with respect to the corresponding node.¹ Thus, due to this configuration, even when the radio link between the user node and the corresponding node is broken, the relay node continues to provide or accept services without the need to change system software or applications on the corresponding node.²

Turning now to the applied reference, Ditzik describes a portable notebook for wireless communications. Figure 1 of Ditzik describes the external architecture of the portable notebook, while Figure 7 describes the internal architecture.

Ditzik further describes that the portable notebook (hereinafter “base unit”) acts as a computing platform and base communications relay station. The base unit 100 may then relay voice and data to/from a handset unit 14 or earset unit 34, where the base unit 100 relays the voice and data information to/from a wide area communication network.³ Furthermore, Ditzik describes the base unit 100 may be designed for a higher transmitting power level than the handset 14 or earset unit 34. Thus, the base unit 100 may relay RF communications between a handset 14 or earset 34 units and an external wide area communications network 33.⁴

¹ See specification at page 10, lines 18-25.

² See specification at page 24, lines 14-23.

³ See Ditzik at column 2, lines 6-65.

⁴ See Ditzik at column 8, lines 35-45.

Claim 1 is distinguishable over Ditzik as the applied reference fails to disclose or suggest *a relay node that is constantly connected to a corresponding node*. The outstanding Official Action asserts that column 2, lines 6-65 of Ditzik disclose this feature.⁵ However, the cited portion of Ditzik merely describes that the base unit acts as a relay between a handset 14 or earset 34 and an external wide area communications network. Furthermore, with respect to Figure 8, Ditzik describes that:

Base unit to external communications operations 79 may be controlled, which includes data/voice wire and wireless options. Control code 81 may control the bi-directional handset or earset to base unit communications operations. These operations may execute roughly simultaneously or on a time shared basis, as indicated by connection 83.⁶

Thus, Ditzik merely describes how the handset and earset communicate with the base unit. However, Ditzik neither discloses nor suggests that the base unit *is constantly connected with a corresponding node*.

Claim 1 is further distinguishable over Ditzik as the applied reference fails to disclose or suggest *a first data processing unit that supplies the data to a program executed by a processor in the relay node according to a communication session identification number included in the data*. The “data” in Claim 1 refers to data received by a first signal receiving unit in the relay node from the corresponding node.

The outstanding Official Action asserts that column 12, lines 50-59 of Ditzik disclose this feature. Referring to Figure 7 of Ditzik, this cited portion states:

External communication means 54 may be connected to the bus, which may be capable of fast two way data transfers. The communications means 54 should be capable of controlling communications to and from a plurality of wire and wireless communication systems. These include wire based telephone means 53 and wireless communication means 51. **The system may include an antenna means 32 for transmitting and receiving electromagnetic radiated signals.** External communication means may be connected to one or more information or communication service providers. (Emphasis Added)

⁵ See Official Action of February 26, 2007 at page 3.

⁶ See Ditzik at column 13, lines 18-24.

The outstanding Official Action asserts that “it is considered that the relay node... [includes] a processor in order to provide wireless communication with the mobile unit and a signal path to a mobile unit such as a channel, a port or a communication session identification number.”⁷

However, while Figure 7 of Ditzik illustrates the base system having a microprocessor 38, Ditzik neither discloses nor suggests that signals from the Wide Area Communications Network(s) 33 are processed by the microprocessor 38. More particularly, Figure 7 of Ditzik illustrates an antenna 32 relaying signals from an external network 33 to the handset unit 14 and the earset unit 34. Thus, Figure 7 of Ditzik merely illustrates the base unit relaying signals through antenna 32 without *supplying data to a program executed by a processor in the relay node*.

Additionally, the above quoted portion of Ditzik does not explicitly disclose or suggest *a communication session identification number included in the data*. The outstanding Official Action appears to assert that “a signal path to a mobile unit” is provided through a channel, a port, or a communication session identification.⁸ However, a communication session identification identifies a session between at least two communicating devices independent of “a signal path” between the two communicating devices. Thus, while it may be implicit that a channel or port may identify a path a signal takes between the handset 14 or earset 34 and an external network 33, Ditzik fails to disclose or suggest that a *communication session identification number* is included in data received from the external network 33.

⁷ See Official Action of February 26, 2007 at page 4.

⁸ See Official Action of February 26, 2007 at page 4.

The outstanding Official Action acknowledges that Ditzik fails to disclose a user node able to act as a server.⁹ To cure this deficiency, the outstanding Official Action relies on Wilson.

The outstanding Official Action asserts that column 4, lines 45-51 of Wilson disclose this feature. This portion of Wilson states:

FIG. 3 is a block diagram of a mobile repeater 300 in accordance with the present invention. The mobile repeater 300 comprises a mobile transceiver 301, a repeater 302, a database 303, a converter 304, encryptors 305, decryptors 308, infrastructure encryption synchronization means 306, repeater encryption synchronization means 307, and a voice on control (VOC) switch element 309, all configured as shown.

Thus, the above portion of Wilson is describing a mobile repeater. Wilson describes the functions of the mobile repeater as (1) communicating with a subscriber unit via a control channel; (2) storing registrations received from the subscriber unit; and (3) maintaining encrypted control channels.¹⁰ Additionally, column 4, lines 10-20 of Wilson further describe the mobile repeater receiving traffic on one channel and repeating the traffic on another channel.

Claim 1 is distinguishable over Wilson as the applied reference fails to disclose or suggest that the mobile repeater is *able to act as a server*. Applicants submit that one of ordinary skill in the art would understand that a server is an information processing apparatus that establishes a connection with another apparatus to service requests by sending back responses and receives services as illustrated in Applicants' specification at least on page 23, lines 29-32 and page 24, lines 24-30.

Wilson merely describes the mobile repeater acting as a switch by performing a function on received traffic (i.e., encryption and decryption) and outputting (i.e., repeating) the traffic on a different channel. However, Wilson neither discloses nor suggests that the

⁹ See Official Action of February 26, 2007 at page 3.

¹⁰ See Wilson at column 3, lines 43-55.

mobile repeater services requests by sending back a response upon receiving traffic.

Additionally, Wilson neither discloses nor suggests the mobile repeater receiving services.

Therefore, the mobile repeater in Wilson does not act like a server.

Accordingly, Applicants respectfully submit that Ditzik and Wilson fail to disclose or suggest all the limitations of Claim 1. Thus, Applicants request that the rejection of Claim 1, and the claims depending therefrom, under 35 U.S.C. § 103(a) be withdrawn.

As Claims 7, 13, and 19 recite features analogous to those recited in Claim 1, Applicants submit that Ditzik and Wilson fail to disclose or suggest all the limitations of Claims 7, 13, and 19. Thus, Applicants request that the rejection of Claims 7, 13, and 19, and the claims depending therefrom, under 35 U.S.C. § 102(b) be withdrawn.

Claim 2 recites that the user node and the relay node act as a virtual node with respect to the corresponding node, where the virtual node is identified by a node address of the relay node.

The outstanding Official Action asserts that column 6, lines 19-45 of Ditzik disclose this feature.¹¹ However, this portion of Ditzik merely describes the different interfaces between the base system and an external network 33. The outstanding Official Action further asserts that “it is considered that the computer is including a node address in order to route [the] signal between the source and destination.”¹²

However, the outstanding Official Action is merely referring to a conventional routing system where a node address for the computer (i.e., base unit) is not required to route a signal from the external network 33 to the handset 14 or earset 34 via the computer. For example, the external network 33 may transmit a signal with a destination address of the handset 14 or the earset 34. When the computer receives this signal, the computer may use a routing table to determine whether to route the signal to the handset 14 or the earset 34. Therefore, it is not

¹¹ See Official Action of February 26, 2007 at page 4.

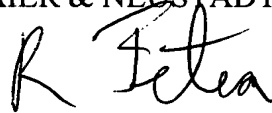
¹² See Official Action of February 26, 2007 at page 4.

implicit in Ditzik that a separate node address is used for the computer when routing signals between the handset 14 or earset 34 and the external communication network 33.

Consequently, in view of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-28 patentably defines over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 03/06)

Remus F. Fetea, Ph.D.
Registration No. 59,140